Release A CDR RID Report

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Originator Chris Lynnes

Phone No 301-286-2260

Organization GSFC DAAC

E Mail Address lynnes@daac.gsfc.nasa.gov

Document Data Server

RID ID CDR 29	
Review SDPS/CSMS	
Originator Ref GD-CDR-CL-13	
Priority 1	

Section   **Page** EN-11   **Figure Table**

Category Name Data Server (DSS) Design   **Actionee** ECS

Sub Category

Subject Handling of Large Requests

Description of Problem or Suggestion:

It appears that any single request greater than 45 GB requires operator intervention before processing begins on the request. This mode of operation has proven in the V0 GDAAC to be unacceptable, and development is underway to fix it. Since 45 GB is only 180 days of AVHRR Pathfinder, a significant number of requests will need to be treated this way.

A quick analysis of GDAAC orders for AVHRR Pathfinder shows 90 of 1183 orders (8%) to exceed 22 GB (adjusting for estimated uncompressed sizes). This exceeds the total staging disk space available for media distribution. If you assume that you can usually use no more than half of that space for any one order, the figure is 138 (12%). (This does not take into account other data that may have been requested on the same order).

Originator's Recommendation

Provide an automated or semi-automated way of breaking up large requests so that they do not choke the distribution.

GSFC Response by: **GSFC Response Date**

HAIS Response by: Glen Cordrey   **HAIS Schedule** 9/6/95

HAIS R. E. M. Huber   **HAIS Response Date** 10/13/95

Configurable parameters will exist for the maximum number of bytes in a request (RID 29), and the maximum number of files in a request (RID 28). The DDIST software will check each request against these limits. A request which exceeds either limit will be suspended with a new state of OPINT, indicating operator intervention required; the operator will also be notified of the existence of the request. The requester will be notified that the request has been suspended because its size requires operator intervention and that the request will be processed as subrequests which will be delievered to the requester individually. The operator can view the details of the request via selection of a view function, which exists in the release A CDR design and will be augmented to support operator sectioning of these large requests.

The display of the details of a distribution request will include a list of the granules and files in the request, and their individual sizes and types. The operator will be able to position a cursor within this list to delimit (via a GUI-supported selection such as a Delimit button) where the request should be sectioned into multiple requests (termed subrequests). The operator will then be able to submit (via a GUI-supported selection, such as a Submit button) - at his discretion - each of these subrequests for processing. Each submitted subrequest will be processed as an independent request, with generation of its own packing slip (if the distribution is via physical media) and notification to the requester when distribution is complete, with the notification also indicating the parent request of this subrequest. Notification to the requester of completion of the last subrequest will also indicate completion of the entire (parent) request.

This approach affords operations flexibility while at the same time offering them a convenient interface for managing very large requests. Operations can decide the granularity and boundaries for sectioning the requests, and when the sectioned subrequests are submitted. At the same time operations can track what portions of the request are already done, and the user has a record of how the request was dispositioned and decomposed."

Status Closed   **Date Closed 10/18/95**   **Sponsor Kobler**

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******   **Attachment if any**   ******